

HDOT MS4 Audit Work Plan

October 26th 2016







Kennedy/Jenks
Consultants

Specific Consent Decree Requirements

Revised workplan addresses all of these

- A.1. The audits shall be completed to fulfill the following goals:
- a. Determine compliance with the federal regulations and state MS4 permits and regulations and this Consent Decree (see Paragraph A.2, below);
- b. Ensure information gathered during the audits is used to promote information and technology transfer between divisions; and
- c. Identify deficiencies and potential violations that are discovered by the third party auditor and allow for timely self-correction of the deficiencies and potential violations by HDOT.

Specific Consent Decree Requirements

Revised workplan addresses all of these

B.6. The Audit Work Plan shall include, but is not limited to:

- the minimum documents to be reviewed (e.g. SWMPs, training records, inspection reports, etc.)
- minimum number of field verifications, as necessary, for each program element evaluated
- deliverables (notices of potential violations, draft and final audit reports), and
- reporting deadlines

Specific Consent Decree Requirements

Revised workplan addresses all of these

D.7. The HDOT Audit Reports shall contain:

- a. A specific statement of the procedures followed, HDOT sites and activities visited and all materials reviewed during the audits;
- Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and recommendations to modify, streamline, or expand them in accordance with what has been learned;
- c. An identification of deficiencies (items which, if not corrected, will lead to potential violations) and potential violations with the applicable SWMPs, this Consent Decree, and/or applicable permit and regulations, and recommendations for improvement;
- d. Identification of best practices and opportunities for information/technology transfer to be applied across all divisions; and
- e. An analysis of the practices implemented for each Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report shall clearly describe the identified impediments.



Letter from HDOH (19 February 2016)

Revised workplan addresses all of these

- 1. Overall, the draft work plan does not provide the level of detail necessary for the DOH to approve of the plan.
- 2. The work plan must clearly detail the method/process by which each of the HDOT's pollution prevention programs will be analyzed.
- 3. The work plan must also include details such as timeframes for the audits and a dedicated process for how recommendations will be vetted.



Letter from HDOH (19 February 2016)

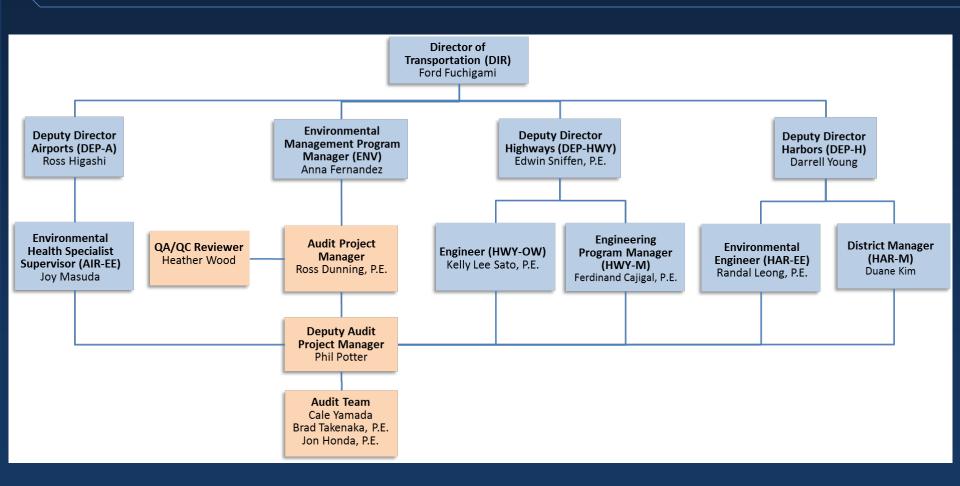
Revised workplan addresses all of these

- 1. The work plan must also:
- a. Identify the specific staff person(s) needed to complete interviews
- b. Key elements of each NPDES regulated activity
- c. Note which specific program activities will be audited
- 2. The work plan must clearly define the deliverable that is expected from the auditor.

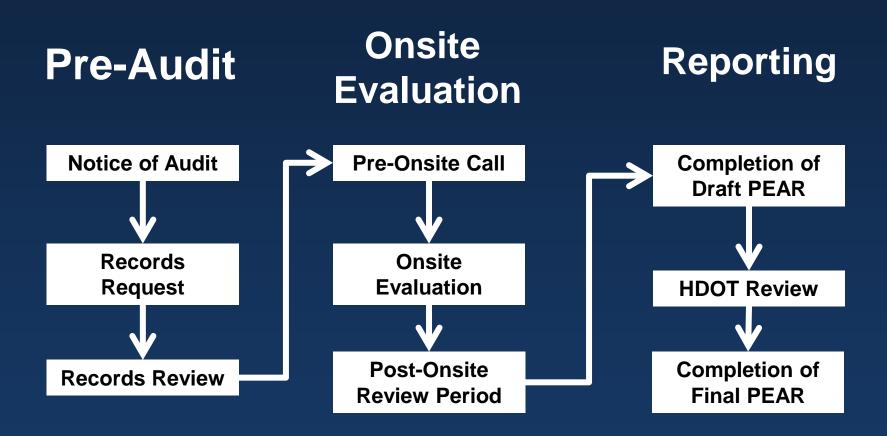
Overarching Goals

- 1. Meet the requirements of the CD
- 2. Meet EPA and HDOH expectations
- 3. Gain internal trust and collaboration
- 4. Seek big picture HDOT-wide opportunities for improvement rather than focusing on minor issues of non-compliance

Organizational Chart



Typical Audit Workflow



Example of Onsite Evaluation – Post-Construction

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

| Air | ports | Harl | oors | Highways | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Kahului Airport | Honolulu International Airport | Honolulu Harbor | Kalaeloa Barbers Point Harbor | Maui District | Öahu District | | | | | | | | |
| Small MS4 Permit | Individual Permit | Small MS4 Permit | Small MS4 Permit | Small MS4 Permit | Individual Permit | | | | | | | | |
| HI 4KE349 | HI \$000005 | HI 03KB482 | HI 03KB488 | HI 14KE352 | HI \$000001 | | | | | | | | |
| 76 Days After AWPA | 77 Days After AWPA | 79 Days After AWPA | 82 Days After AWPA | 76 Days After AWPA | 78 Days After AWPA | | | | | | | | |
| Tuesday 30 May 2017 | Wednesday 31 May 2017 | Friday 2 June 2017 | Monday 5 June 2017 | Tuesday 30 May 2017 | Thursday 1 June 2017 | | | | | | | | |
| 8am – 9am Kickoff Meeting [See Note (a)] | 8am – 9am Kickoff Meeting [See Note (a)] | 8am – 9am Kickoff Meeting [See Note (a)] | 8am – 9am Kickoff Meeting [See Note (a)] | 1pm – 2pm Kickoff Meeting [See Note (a)] | 8am – 9am Kickoff Meeting [See Note (a)] | | | | | | | | |
| 9am – 11am Onsite Evaluation [See Note (b)] | 9am – 11am Onsite Evaluation [See Note (b)] | 9am – 11am Onsite Evaluation [See Note (b)] | 9am – 11am Onsite Evaluation [See Note (b)] | 2pm – 4pm Onsite Evaluation [See Note (b)] | 9am – 11am Onsite Evaluation [See Note (b)] | | | | | | | | |
| BMP 1: OGG CONRAC, location tentative | BMP 1: Pervious pavement and bioswale systems, NDWP New Employee Parking Lots at Elliott St | BMP 1: Alaska Marine Lines, Pier 29 | BMP 1: GLP Asphalt Facility | [BMPs will be inspected only if they are installed by this time] | BMP 1: University Ave. Bioswales, In median of H-1 ramps to University Ave. on makai side of freeway | | | | | | | | |
| BMP 2: Wash rack, location tentative | BMP 2: Contech CDS 2025 System and FloGuard drop inlet filtration insert, NDWP Diamondhead Site Improvements, GSE Lot fronting Hardstand 3 | BMP 2: Matson Auto Facility, Pier 32 | [Additional BMPs will be inspected only if they are installed by this time] | | BMP 2: Fort Weaver Rd. CDS Units, Fort Weaver Rd., Ewa | | | | | | | | |
| [An additional BMP will be inspected only if one is installed by this time] | BMP 3: Bioswale system, Kalewa St Storage Lots 1-6, Corner of Lagoon and Kalewa St. | BMP 3: HC&D Facility, Pier 60 | | | BMP 3: Luluku Storm Water Treatment System, H-3/Likelike interchange, Kaneohe | | | | | | | | |
| 11am – 12pm Debrief Meeting [See Note (c)] | 11am – 12pm Debrief Meeting [See Note (c)] | 11am – 12pm Debrief Meeting [See Note (c)] | 11am – 12pm Debrief Meeting [See Note (c)] | 4pm – 5pm Debrief Meeting [See Note (c)] | 11am – 12pm Debrief Meeting [See Note (c)] | | | | | | | | |

Schedules have been coordinated with Division staff

Verify that up to three (3) structural and source control BMPs approved by each permittee and subject to post-construction requirements were installed and are being maintained properly in the field.

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On-Site Evaluation Dates (Tentative)

Table 5-1 Tentative On-Site Evaluation Dates

On-site inspections have been scheduled

| PEAR | On-Site Evaluation | | | | | | | | | |
|---|----------------------------|--|--|--|--|--|--|--|--|--|
| PEAR #1: Post-Construction / Permanent Best | Tuesday 30 May 2017 to | | | | | | | | | |
| Management Practices | Monday 5 June 2017 | | | | | | | | | |
| PEAR #2: Construction Site Runoff Control | Monday 27 November 2017 to | | | | | | | | | |
| FLAR #2. Construction Site Runon Control | Friday 1 December 2017 | | | | | | | | | |
| PEAR #3: Public Outreach / Public Involvement Program | [none required] | | | | | | | | | |
| PEAR #4: Illicit Discharge Detection and | Monday 19 November 2018 to | | | | | | | | | |
| Elimination Program Element and Industrial Commercial Activities/Tenant Program | Monday 26 November 2018 | | | | | | | | | |
| PEAR #5: Pollution Prevention / Good | Monday 20 May 2019 to | | | | | | | | | |
| Housekeeping Program | Friday 24 May 2019 | | | | | | | | | |
| PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability | [none required] | | | | | | | | | |

Guiding Questions from EPA (2007)

Program Element Audit Report (PEAR) #1 Post-Construction / Permanent BMPs

- A Overall Approach
- **B Ordinance/Legal Authority**
- **C Post-Construction BMP Standards**
- **D Plan Review and Approval Procedures**
- **E Post-Construction BMP Inventory**
- **F BMP Inspection & Maintenance**
- **G** Enforcement
- **H Public Construction Projects**
- **I Consent Decree Questions**



Guiding Questions from EPA (2007)

Appendix B1: PEAR #1 - Post-Construction / Permanent Best Management Practices

| | | Airp | orts | Har | bors | High | ways |
|--------------------|---|---|--|---|--|--------------------------------|---------------------------------|
| Question Number | Question | Kahului Airport Small MS4 Permit | Honolulu International Airport Individual Permit | Honolulu Harbor Small MS4 Permit | Kalaeloa Barbers Point Harbor Small MS4 Permit | Maui District Small MS4 Permit | Oahu District Individual Permit |
| | | HI 14KE349 | HI S000005 | HI 03KB482 | HI 03KB488 | HI 14KE352 | HI S000001 |
| Α | Overall Approach | | | | | | |
| A1 | Discuss the process chronologically in the order that a project would occur. Walk us through the process as if we were a developer proposing a project. | | | | | | |
| В | Laws/Rules/Regulations/Policies | | | | | | |
| B1 | What legal authority does the permittee have to require post-construction BMPs on development sites and to ensure maintenance? | | | | | | |
| B2 | Does the permittee's legal authority address post-construction requirements for all projects disturbing one acre or more? | | | | | | |
| B3 | Does the legal authority require site design, source control, and stormwater treatment BMPs? | | | | | | |
| B4 | What exemptions do the laws/rules/regulations/policies or other legal authority allow? | | | | | | |
| B5 | What procedures for alternative compliance (i.e., planning-level BMPs and other non-structural controls) are allowed? | | | | | | |
| B6 | Does the legal authority authorize the permittee to require stormwater management plans to address post-construction impacts? | | | | | | |
| B7 | Do the laws/rules/regulations/policies outline the contents of an approvable plan and responsibilities for operation and maintenance of approved BMPs? | | | | | | |
| С | Post-Construction BMP Standards | | | | | | |
| C1 | What technical guidance (e.g., BMP manual) does the permittee use as the standard for design and selection of post-construction BMPs? Note: It is not necessary to do a thorough review of the manual or standards used by the permittee. | | | | | | |
| C2 | Are project proponents required to follow a technical guidance manual? | | | | | | |
| C3 | Does the guidance provide siting and use criteria for the BMPs to ensure proper and adequate BMPs are being selected and implemented? | | | | | | |
| C4 | Does the guidance provide siting and use criteria for BMP selection based on the development context (i.e., BMP selection appropriate for ultra urban-areas versus those more appropriate for more rural settings with larger parcels)? | | | | | | |
| C5 | Are pollutants of concern that are typically generated by the proposed development type considered when selecting or approving BMPs? | | | | | | |

Guiding Questions from EPA (2007)

Program Element Audit Report (PEAR) #2 Construction Site Runoff Control

A Ordinance/Legal Authority

B Construction Site Inventory

C Construction Requirements and BMPs

D Plan Review Procedures

E Construction Site Inspections

F Program Support and Resources

G Enforcement

H Training and Education

I Public Construction Projects

J Consent Decree Questions



Guiding Questions from EPA (2007)

Program Element Audit Report (PEAR) #3 Public Outreach / Public Involvement

A Goals and Objectives

B Message Development

C Target Audiences

D Message Packaging

E Distribution Mechanisms

F Evaluation Methods

G Public Participation Activities

H Consent Decree Questions



Guiding Questions from EPA (2007)

Program Element Audit Report (PEAR) #4

Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

IDDE

A Legal Authority

B Mapping

C Field Screening

D Investigation of Potential Illicit Discharges

E Spill Response and Prevention

F Public Awareness and Reporting Program

G Preventing Sanitary Sewer Discharges

H Education and Training

I/C

I Legal Authority

J Facility Inventory

K Standards, BMPs and Outreach

L Staff Training

M Inspections

N Program Support and Resources

O Enforcement

P Consent Decree Questions



Guiding Questions from EPA (2007)

Program Element Audit Report (PEAR) #5 Pollution Prevention / Good Housekeeping

- A Infrastructure Mapping and Characterization
- **B Catch Basin Cleaning**
- **C Stormwater Management Structures**
- **D Street Sweeping**
- **E Public Streets, Roads and Highway Maintenance**
- F Facility Inventory
- G Chemical and Hazardous Material Use and Disposal
- H Pesticide, Herbicide and Fertilizer Application and Management
- **I Municipal Staff**
- J Contracted Services Staff
- K Training and Education
- L Consent Decree Questions

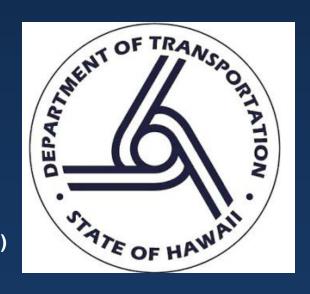


Guiding Questions from EPA (2007)

Program Element Audit Report (PEAR) #6

Staffing, Funding, Organizational Structure, Availability of Resources, and Storm
Water Program Sustainability

- **A SWMP Planning Documents**
- **B Staff Inventory and Organization**
- **C Performance Standards or Goals**
- **D** Prioritization of Resources
- **E Assessment and Evaluation of Programs**
- F Assessment and Evaluation of BMPs
- **G** Assessment and Evaluation of Water Quality
- H Dry & Wet Weather Outfall Screening and Monitoring (If Applicable)
- I Biological Monitoring (If Applicable)
- J Ambient Monitoring (If Applicable)
- **K Data Collection and Reporting**
- L Consent Decree Questions

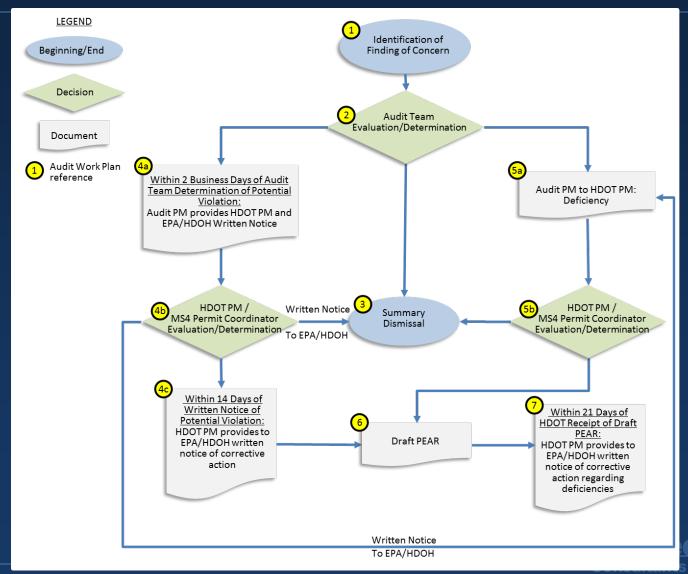


Responding to Findings of Concern

Potential Violations: areas where the evaluation found the permitee not in compliance with a specific permit requirement or SWMPP commitment

Deficiencies: items which, if not corrected, may be anticipated to lead to Potential Violations

Responding to Findings of Concern



Next Steps

- 1. September 16th 2016 HDOT submitted Draft Audit Work Plan (V2) to EPA for review
- 2. October 31th 2016 (+ 45 days) EPA provides comments
- 3. December 9th 2016 (+ 39 days) HDOT submits revised Draft Final Audit Work Plan (V3) to EPA review
- 4. January 23rd 2017 (+ 45 days) EPA provides comments, if any
- 5. February 13th 2017 (+ 21 days) HDOT addresses any remaining comments, submits revised Final Audit Work Plan (V4)
- 6. March 15th 2017 (+ 30 days) Final Audit Work Plan (V4) deemed approved if no additional comments received. Starts "clock".



Next Steps

| | 2017 | | | | | | | | | | | | | 2018 | | | | | | | | | | | | 2019 | | | | | | | | | | | | 2020 | | |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|--|
| PEAR | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | ОСТ | NOV | DEC | JAN | FEB | MAR | APR | MAY | NOC | JUL | AUG | SEP | ОСТ | NOV | DEC | JAN | FEB | MAR | APR | MAY | NUL | JUL | AUG | SEP | ОСТ | NOV | DEC | JAN | FEB | MAR | |
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